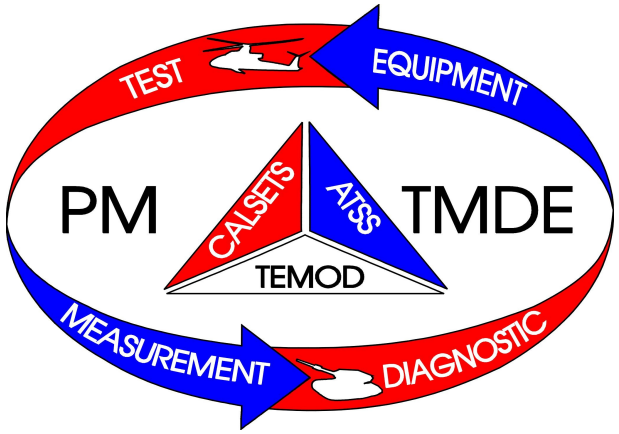
PM Test, Measurement and Diagnostic Equipment

Maintenance Support Device (MSD)



Presented to:
IADS Users

May 7, 2003

Presented by:
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Agenda

- **MSD and Accessories**
- **Warranty**
- **Process to Obtain MSD**
- **Questions**

MSD-Basic (MSD-B) Characteristics

13.3” Milbrite Sunlight Readable Display

Full size QWERTY Keyboard

Removable 40 GB Hard Drive

Direct DC Connection
Mating Connector MS3476W14-4S

DVD/CD-RW Drive

Floppy Drive

Removable LiIon Batteries

MSD-B Characteristics (Continue)

- 700 MHz Pentium® Processor (Upgraded to 1.3 GHz Pentium® M)
- 256 MB RAM (Upgraded to 512 MB)
- 8 MB Video RAM (Upgraded to 64 MB)
- Magnesium Composite Enclosure

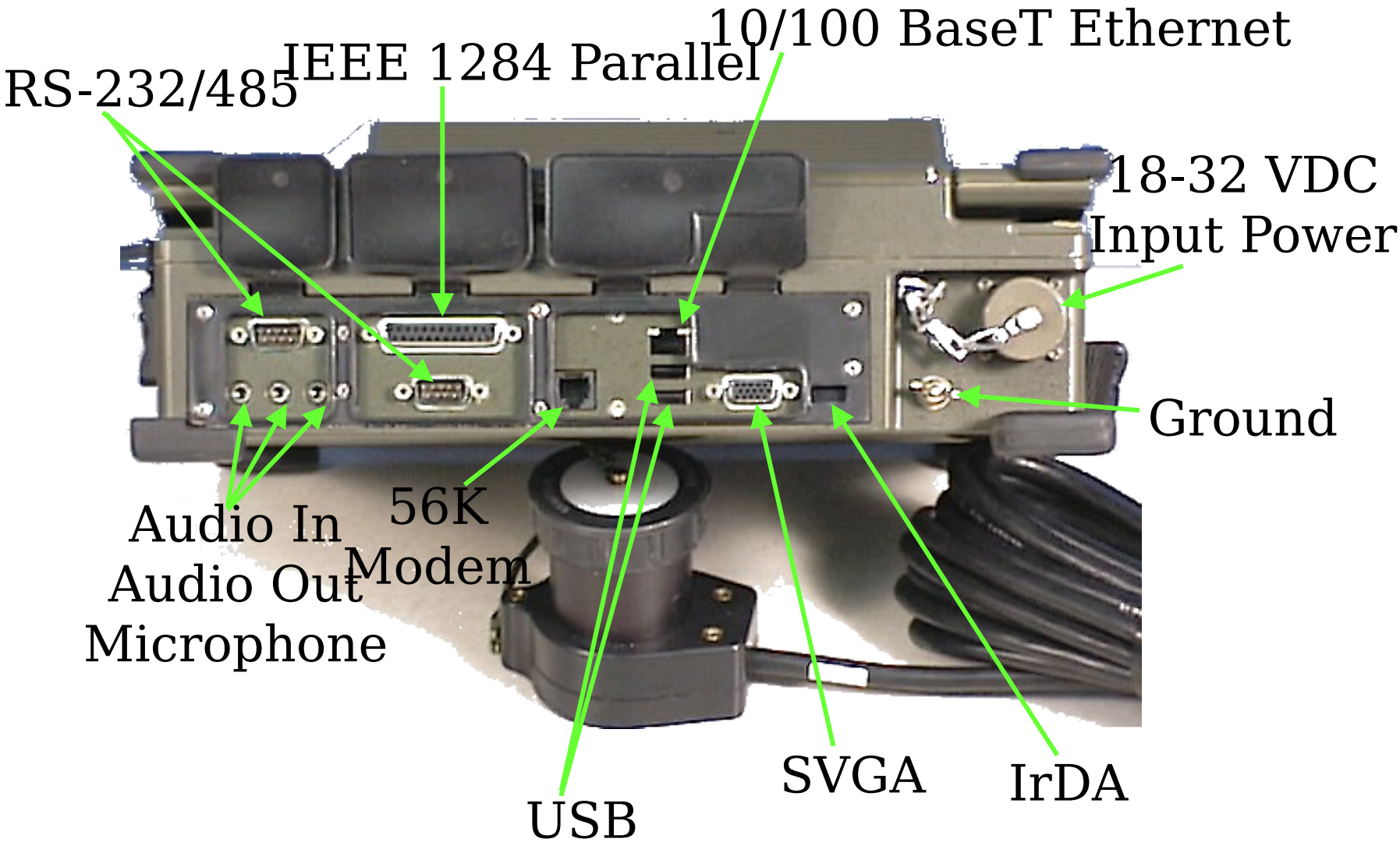
MSD Specifications

Dimensions	13” W x 12” D x 4” H	
Weight	13 lbs	
Temperature	Operating	-18ºC to +50ºC
	Non-Operating	-32ºC to +65ºC
Shock	30G, 11millisecond, ½ Sine Shock (Operational), 36” Drop Shock	
Altitude	Operating	Sea level to 12,500 feet
	Non-Operating	Sea level to

MSD Specifications (Continue)

EMI	MIL-STD-461, FCC B Part 15	
Sand/Dust	MIL-STD-810F, Method 510.4, Procedures I & II	
Salt Fog	MIL-STD-810F, Method 509.4	
Rain	MIL-STD-810F, Method 506.4, Procedure I	
Humidity	Operating Relative Humidity	10% - 95%
	Non-Operating Relative Humidity	5% - 95%

MSD-B Input/Output Interfaces



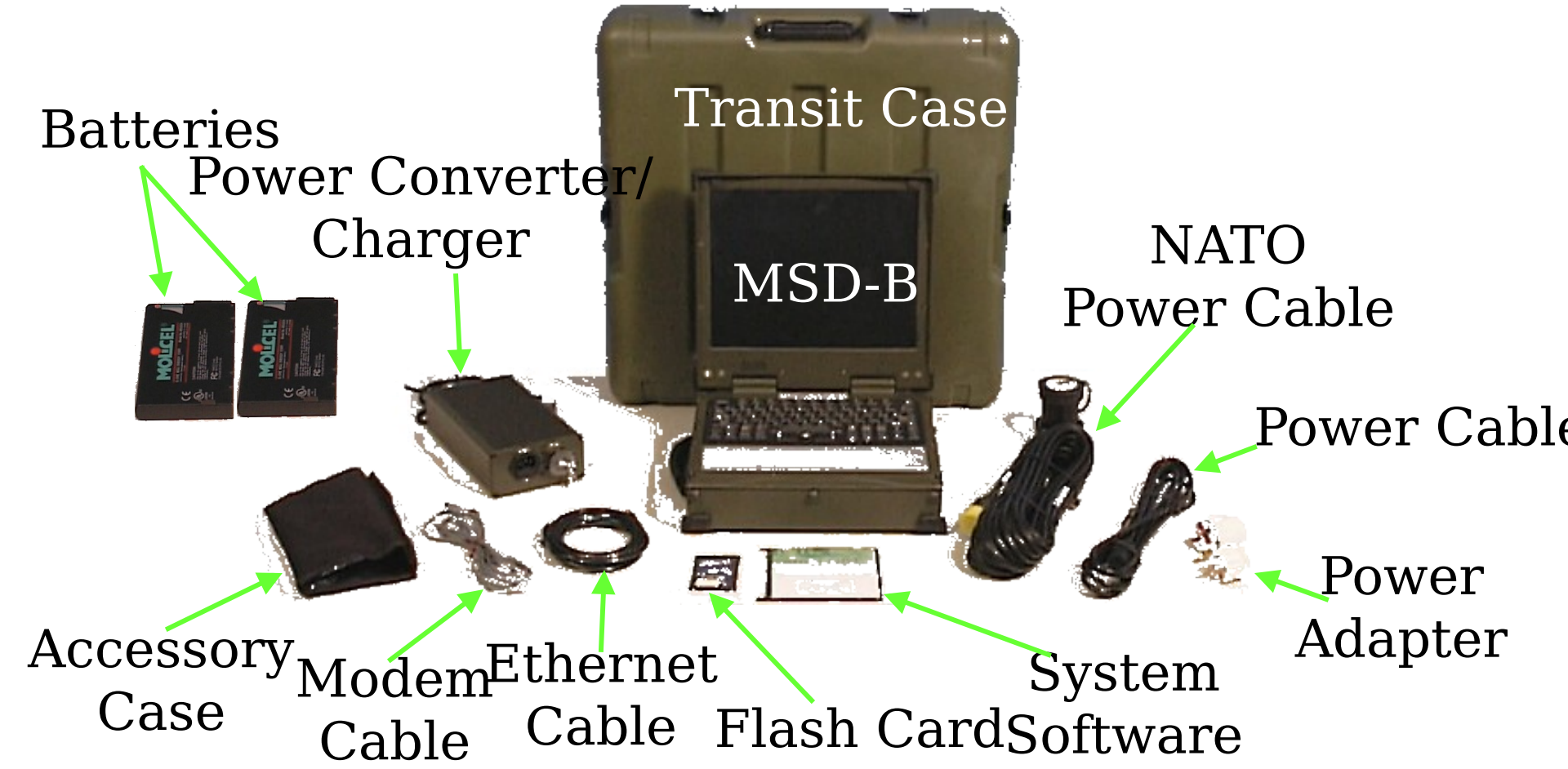
PCMCIA Card Slots

Type III PCMCIA
(or 2 Type II)

Clamp-Tite PC Card

Cable Strain Relief System

Test Set, Electronic System AN/PSM-95B



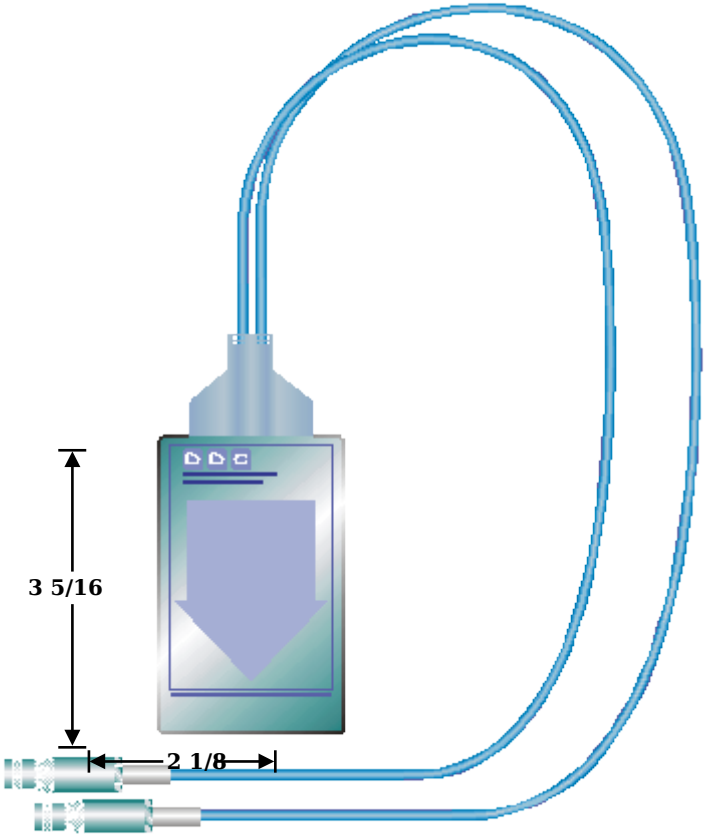
MSD Special Purpose Cards

PCMCIA Cards

- 16 MB Flash Memory
- NI Digital Multimeter
- MIL-STD-1553B
- SCSI Controller
- DMM/Counter/Timer (ICE)

USB

- IEEE 488 USB Controller



Internal Combustion Engine (ICE)

Data Bus Capabilities

- J1708
  - M915-17, PLS, FMTV, HET, Stryker
- J1939
  - Medium Tactical Vehicle Replacement
    Command & Control
- ATEC
  - PLS, HET
- GM UART
  - HMMWV Transmission
- J1850 (GM, Chrysler)
  - HMMWV (GM)
- Modified ISO9141
  - M939 Haldex ABS Brake System

Analog ICE Capabilities

- AC & DC Voltage
- AC & DC Current
- Resistance
- Frequency
- Pressure

Contract

PRIME CONTRACTOR: Miltope Corporation: Hope Hull, AL

CONTRACT DURATION: Five Years Indefinite Delivery Indefinite Quantity (IDIQ)

PRODUCTS AND SERVICES

- Maintenance Support Device (MSD)
- ICE Equipment
- System Recovery Disk
- Technical/Warranty Support
- Test/Instrumentation Hardware
- Pre-Planned Product Improvement Program

HARDWARE DELIVERY

- 120 Days ARO

FIVE YEAR WARRANTY

- CONUS -

- 72-Hour in Factory Turnaround
- Gound Shipping Paid by Miltope
- Toll Free Assistance
- Monday-Friday, 0800-2000EST 1-888-5SPORT0 (577-6780)

- OCONUS

- Directly to and from unit via APO. Miltope will issue USPS Acct. # for shipping when units call for assistance.

Data Interchange

- **Modify PM BOIP to Reflect MSD Requirement**
- **PM Submits DI Form (DA 5561-R)**
- **PM, TMDE Verifies Requirement Against BOIP**
- **If Not Valid, Then Reject DI**
- **If Valid, Enter Requirement on Schedule and Coordinates Ship Date(s) and Ship to Address(es)**

Customers/Users

- Abrams
- Apache
- Air Force
- Armored Security Vehicle
- Army Training Facilities
- Army Tactical Missile System
- Avenger
- Aviation and Mission Planning System
- Black Hawk
- Bradley
- Calibration Set (TMDE)
- Comanche
- Command Control Vehicle
- Chinook
- Deployable Universal Combat EarthMover
- Firefinder
- Heavy Tactical Vehicles with Trailers
- Hercules
- High Frequency Radio Gateway to the Tactical Internet
- High Mobility Artillery Rocket System
- High Mobility Multipurpose Wheel Vehicle
- Hunter
- Hydraulic Excavator
- Javelin
- Kiowa
- Land Warrior
- Long Range Advance Scout Surveillance System
- Family of Medium Tactical Vehicles with Trailers
- M915/M916/M917/M939 Family of Vehicles
- Multiple Launch Rocket System (Carrier and Launcher)
- Navy
- Nuclear, Biological and Chemical Reconnaissance System – FOX
- Paladin
- Phased Array Tracking Radar Intercept On Target (PATRIOT)
- National Guard Regional Training Site - Maintenance
- Shadow
- Stryker
- Tactical Quiet Generator
- Theater High Altitude Area Defense System
- Wolverine

Next Generation MSD

(Draft Specification)

- **Hardware Specification (DRAFT)**
  - Processor: Pentium 4, 2.0 Gigahertz (GHz)
  - Memory: 512 MB RAM, Expandable to 1GB
  - Display: Tablet 12.1” Color active matrix, capable handling 1024x764 resolution, Sunlight readable, Touch screen
  - Video: 64 MB RAM, AGP
  - Hard Disk: 60 GB or greater, 4200rpm
  - Audio: Commercially Available Internal Sound Card
  - Ports: Two (2) Serial Recommended Standard RS-232 configurable to

    2-wire or 4-wire RS-485, Two (2) USB, IrDA Infrared, External Video Output, 1 type III or 2 type II Slots PCMCIA (PC-card)
  - Networks: Internal V.92/56K Modem, Wire and Wireless Ethernet
  - Input Devices: Integrated Full Sized QWERTY Keyboard with arrow and function key, Integrated Pointing Device (Mouse),

    8X DVD/24x10x24 CD-RW Drive,1.44MB Floppy Disk Drive, Flash Memory PCMCIA card

Next Generation MSD
(Draft Specification)

- **Software Specification (DRAFT)**
  - Operating System: Microsoft Windows XP Professional Tablet Edition
  - Recovery Disk: A DVD or CD Boot Disk included
- **Power Specification (DRAFT)**
  - Input: 18-32 Volts Direct Current (DC) Power, 110/220 Volts at 47-400 Hertz Alternating Current (AC) Power
- **Available for fielding**
  - To Be Determined

POINTS OF CONTACT

PM, TMDE

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SUMMARY

- **MSD**
  - **Lightweight portable computer test system**
  - **Rugged system**
  - **5-year warranty**
- **MSD-ICE**
  - **Improvement from STE-ICE/R and CTS-ICE**
- **Data Interchange Form**
  - **Must put your requirements**

QUESTIONS

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